

APPENDIX E

PART III

Pre-Approved Projects/Facility Changes

Part III. contains construction permit requirements and permits any future projects/facility changes listed in Part III.A. of this construction permit and operation permit. All projects/facility changes installed under Part III.A. of construction permit 04-SJZ-142 and operation permit 617056660-P01 after the issuance of this operation permit shall operate under the conditions established when the projects/facility change was installed even if the Environmental Cooperative Agreement expires or is revoked. If the Environmental Cooperative Agreement expires or is revoked for any reason, the installation of any future project/facility change under Part III.A. of this operation permit will be prohibited. All future projects shall then be permitted according to the traditional NR 406, Wis. Adm. Code, construction permitting program. If the Environmental Cooperative Agreement expires or is revoked for any reason, the permittee shall comply with any delayed compliance deadlines and practical interim requirements established by the Department in a written revocation decision until the Department issues the approvals required under chs. 280 to 295, Wis. Stats, that were replaced by the above referenced Environmental Cooperative Agreement.

III. A. Authorization of Future Projects/Facility Changes

The permittee may modify or construct any of the following projects/facility changes as approved under air pollution control permit 04-SJZ-142 and adopted by this operation permit, during the term of the Environmental Cooperative Agreement and new source permit 04-SJZ-142, subject to all applicable conditions of Part III of this permit. All other projects shall be permitted according to NR 406, Wis. Adm. Code, construction permitting program. If the Environmental Cooperative Agreement expires or is revoked for any reason, the installation of any future project/facility changes under Part III.A. of this operation permit will be prohibited. All future projects shall then be permitted according to the traditional NR 406, Wis. Adm. Code, construction permitting program. Potential to emit emissions (after controls) from the following projects/facility changes listed below shall be limited to less than 100 tons per year for each of the following criteria pollutants: carbon monoxide, oxides of nitrogen, particulate matter, sulfur dioxide, volatile organic compounds, lead, or lead compounds.¹ See Part III.K.1. for requirements. The facility shall meet any new state or federal requirement that is triggered as a result of the installation of processes under Part III.A. The operation permit shall be revised in accordance with procedures in s. NR 407.11, s. NR 407.12, or s. NR 407.13, of the Wis. Adm. Code, as appropriate, if any new state or federal requirements are triggered.

Project/Facility Change	Description
(1) Spray/Paint Booth Coating	Modify OR install a spray coating booth, effectively similar to that of existing spray booth Process P09. Such a project or facility change does not entail web coating.
(2) Ceramic Fiber Making	Modify OR install a ceramic fiber making line, effectively similar to that of existing ceramic fiber Process P15, P16, P17, P18, and P19.
(3) Chromium Plating	Modify, install, OR reconstruct a chromium electroplating operation, effectively similar to that of the existing chrome plating Process P08 and P14.
(4) R&D/Pilot/Development Projects	Modify OR install a process for manufacturing research, development, scale-up, OR prototype, which is NOT otherwise included in pre-approvals (1), (2), (3), or (5) of this permit that is not listed in s. NR 405.02(22)(a)1, Wis. Adm. Code, and does not require a permit under ch. NR 405 or NR 408, or under s. NR 446.05, Wis. Adm. Code.
(5) Web Coating	Modify a web coating line, OR install one or more web coating lines.

¹ Because potential to emit emissions (after controls) are limited to less than 100 tons per year for carbon monoxide, oxides of nitrogen, particulate matter, sulfur dioxide, volatile organic compounds, lead, or lead compounds, an environmental assessment is not required under section NR 150.03(8)(b)1, Wis. Adm. Code.

Project/Facility Change	Description
(5) Web Coating (continued)	<p>The term web coating line has the meaning assigned at 40 CFR 63 Subpart JJJJ; that is, <i>any number of work stations, of which one or more applies a continuous layer of coating material across the entire width or any portion of the width of a web substrate, and any associated curing/drying equipment between an unwind or feed station and a rewind or cutting station.</i></p> <p>Any of the web coating lines in existence at the time of issuance of this permit may be modified according to requirements contained in Part III of this permit. Installation of one or more new web coating lines and any subsequent or modification of such lines, may include, but is not limited to, a web coating line similar in design and function to that of the existing tape coating line [Process P07], the Gamma Line [Process P20], any of the optical film coating lines [Processes P06, P10, P11, P12, and P13], the E-Beam [Process I2], hot melt coater [Process I6], elastic coating 1 [Process I7], and elastic coating 2 [Process I8].</p> <p>The term "web coating line," as used in this permit includes:</p> <ul style="list-style-type: none"> • ancillary equipment of the web coating line for processing and/or handling raw materials associated with coating operations, to the extent that these operations are subject to 40 CFR 63 Subpart JJJJ rather than subject to 40 CFR 63 subpart HHHHH [Miscellaneous Coating Manufacturing]. • Installation of a thermal oxidizer or catalytic oxidizer, as may be needed to meet the emissions standards of 40 CFR 63 subpart JJJJ [Note: installation of a solvent recovery unit as an air pollution control device is not included under this pre-approved project]

III. B. Requirements that apply to all projects/facility changes authorized under Part III.A: General

1. The facility shall meet the facility-wide VOC emissions cap of 20.75 tons per month, averaged over any 12 consecutive month period.
2. No project/facility change authorized under Part III.A of this permit shall constitute any of the stationary sources named under 40 CFR 52.21(b)(1)(i)(a) and NR 405.02(22)(a), Wis. Adm. Code, for which the threshold for a major stationary source is 100 tons per year of any regulated NSR pollutant.
3. VOC emissions across the entire facility shall be compiled for each month, by the 20th day of the succeeding month, according to the following:
 - (a) For each month:
 - COMPILE:** daily VOC emissions data for all processes at the facility
 - CALCULATE:** VOC emissions for each month according to I.J.1.b.(2) and III.K.1.
 - CALCULATE:** average monthly VOC emissions by summing the emissions of the current month with those of the preceding 11 months, and dividing by 12 according to I.J.1.b.(3)
 - DUE:** by the 20th day of the following month and include this emission data in the Semi-annual Monitoring Summary Report
4. The permittee shall maintain a log which identifies each instance of a project/facility change made under authorization of Part III.A of this permit
5. For each instance of a project/facility change made under authorization of Part III.A of this permit, the following notifications shall be provided to Wisconsin DNR.
 - (a) Initial Notification.
 1. for R&D/Pilot/Development projects authorized under Part III.A(4) of this permit, the notification shall be sent to Wisconsin DNR within 10 days prior to implementation of the project/facility change, and shall include a description of how records will be maintained for that project for purposes of assuring continued compliance with the facility-wide emissions limit as well as any relevant limits. The notification shall also include an operating schedule, explanation of any calculations, emission factors, or other information which will enable the recordkeeping to be performed.
 2. the Wisconsin DNR shall approve or deny the notification requesting a research and test exemption under s. NR 406.04(1)(i), Wis. Adm. Code, for a R&D/Pilot/Development project in writing within 10 business days of being received. During this 10 day period, the Wisconsin DNR will decide if a public notice, an opportunity for public comment, and/or a public hearing of the notification requesting a research and test exemption are necessary.
 3. for all other projects authorized under Part III.A of this permit, the notification shall be sent to Wisconsin DNR within 3 days prior to implementation of the project/facility. Recordkeeping for the projects listed in Part III.A. will be performed according to requirements of the relevant section in this operation permit for these projects.
 - (b) Start-up Notification. Notify Wisconsin DNR within 30 calendar days after start-up of any project/facility change authorized under Part III.A of this permit. This notification shall include the following information.
 1. a general description of the project, emission calculations, emission rates, identification of which pre-approval under Part III.A of the permit applies, and an explanation of why the project is covered under that pre-approval.
 2. a listing of all applicable permit requirements for the pre-approved project/facility change [e.g. a web coating line installed without a thermal oxidizer is not subject to the thermal oxidizer requirements delineated in Part III.J.]
 3. how VOC emissions will be tracked against the facility cap in addition to requirements in Part I.J.1. [including a description of emissions factors]

4. identification of any NR 445 substances, and the analysis for each, as required under this permit, demonstrating that the NR 445 emission threshold is satisfied, or that through modeling the concentration of the NR 445 substance at the property line is below required levels.
5. identification of any of the criteria pollutants NO_x, SO_x, or PM, and modeling or other demonstration, as required under this permit, showing that the NAAQS and ambient air increments will not be exceeded at the property line of the facility²
6. Applicable requirements for projects undertaken per the construction permit under will be incorporated into the operation permit using the procedures outlined within s. NR 407.07(3), Wis. Adm. Code upon renewal of the operation permit or through permit revision in accordance with procedures in s. NR 407.11, s. NR 407.12, or s. NR 407.13, Wis. Adm. Code, whichever is most appropriate.

² The modeling analysis shall include the most recent list of stacks and stack parameters.

III. C. Requirements that apply to all projects/facility changes authorized under Part III.A: Evaluation of NR 445 substances

1. This facility shall apply NR 445 with revisions once approved.
2. No Table B (pesticides, rodenticides, insecticides, herbicides, and fungicides) or Table C (pharmaceuticals) substances of NR 445 shall be emitted by any project/facility change authorized under Part III.A of this permit.
3. All modeling of emissions performed in connection with evaluation of NR 445 substances, as noted herein, shall be consistent with *WDNR Dispersion Modeling Guidelines* (November 2003).³
4. Prior to implementation of any project/facility change authorized under Part III.A of this permit, each Table A substance of NR 445 which will be emitted by the equipment of that project/facility change shall be evaluated according to the procedures set forth in items III.C.5 of Part III, with the following exceptions.
 - (a) Evaluation of Table A substances of NR 445 is not required for any project/facility change authorized under Part III.A.5. All such project/facility changes are associated with an affected source defined by and subject to or subsumed under [according to the streamlining analysis] a standard promulgated under section 112 of the Clean Air Act. [s. NR 445.01(1)(b), Wis. Adm. Code]
 - (b) Evaluation of Table A substances of NR 445 is required only for substances other than chromium for any project/facility change authorized under Part III.A.3. All such project/facility changes involve an affected source defined by and subject to a standard promulgated under section 112 of the Clean Air Act. [s. NR 445.01(1)(b), Wis. Adm. Code]

5. PROCEDURE: Evaluation of Table A NR 445 Hazardous Air Pollutants

- (a) **IDENTIFY:** all Table A NR 445 substances that will be emitted by the new or modified equipment of the proposed project/facility change, consistent with the level of due diligence defined at NR 445.02(5).
- (b) **QUANTIFY:** potential hourly emissions of each Table A substance of NR 445 identified at Condition C.4.(a) by emission point for the equipment of the proposed project/facility change
- (c) **SUM:** for each substance identified at Condition C.4.(a), sum for each of the four stack categories of Table A the potential hourly emissions from equipment of the proposed project/facility change, with exception of any exempt emissions, such as those associated with equipment subject to section 112 of the Clean Air Act [s. NR 445.07(6)(b)1. and s. NR 445.01(1)(b), Wis. Adm. Code]
- (d) **COMPARE:** each group (the four stack categories) of emissions with the corresponding threshold found in Column (c), (d), (e), or (f) of Table A
 - IF:** no group of emissions exceeds the respective thresholds, **THEN:** document the analysis and submit with the Start-up Notification under Condition Part III.B.5.(b). **OTHERWISE:** proceed to Condition Part III.C.5.(e) [s. NR 445.07(6)(b)2. and s. NR 455.07(6)(c), Wis. Adm. Code]
- (e) **MODEL:** to determine the maximum potential concentration of the substance off the source property, including potential emissions of the substance from both the proposed project/facility change and the rest of the facility, with exception of any exempt emissions, such as those associated with equipment subject to section 112 of the

³ The modeling analysis shall include the most recent list of stacks and stack parameters.

Clean Air Act [\[s. NR 445.07\(6\)\(c\), Wis. Adm. Code\]](#). **IF** this concentration is no more than the corresponding concentration in column (g) of Table A, **THEN**: document the analysis and submit with the Start-up Notification under Condition Part III.B.5.(b), **OTHERWISE**: proceed to Condition Part III.C.5.(f) or (g).⁴

(f) **APPLY**: one of the compliance methods of NR 445.08(2)(a), (b), (c), (d), or (e), and reapplying the modeling analysis, if applicable. Any operating or other limitation (e.g. limiting throughput or hours of operation of an emissions unit) which is applied under NR 445.08(2)(a), (b), (c), (d), or (e) shall be included in the Start-up Notification under Condition Part III.B.5.(b), along with suitable recordkeeping which provides ongoing demonstration of compliance with that operating or other limitation. [\[s. NR 445.08\(2\)\(a\) - \(e\), Wis. Adm. Code\]](#)

(g) **APPLY**: BACT or LAER, in lieu of a limitation under Condition Part III.C.5.(f), if this is identified as an option in column (i) of Table A [\[s. NR 445.08\(2\)\(f\), Wis. Adm. Code\]](#). Submit a proposal for BACT or LAER, as appropriate, to WDNR, and do not proceed with the proposed change until approved by WDNR.

⁴ The modeling analysis shall include the most recent list of stacks and stack parameters.

III. D. Requirements that apply to all projects/facility changes authorized under Part III.A: Evaluation of PM, NO_x and SO_x emissions

1. Prior to implementation of any project/facility change authorized under Part III.A of this permit which will involve an increase of potential emissions of PM, NO_x, **AND/OR** SO_x, the permittee shall assess compliance with the corresponding National Ambient Air Quality Standards and PSD increments. The facility-wide dispersion model, as noted at Part I.J.2.a, shall be revised according to the potential emissions of PM, NO_x, **AND/OR** SO_x.
2. All modeling shall be performed in accordance with *WDNR Dispersion Modeling Guidelines* (November 2003).⁵
3. **IF:** the modeling demonstrates compliance with the PSD increments and National Ambient Air Quality Standards (NAAQS) for each of the substances PM, NO_x, and SO_x which will be emitted by the project/facility change authorized under Part III.A, **THEN:** the permittee may proceed with the project/facility change, according to all other applicable requirements of Part III of this permit. The permittee shall submit results of the updated dispersion model with the Start-up Notification under Condition Part III.B.5.(b).
4. **IF:** compliance with one or more PSD increments or NAAQS of PM, NO_x, and SO_x is not demonstrated by modeling performed under Part III.D.1, **THEN:** the permittee may re-do the dispersion model with revised stack parameters, work-practice limits, or other constraints which result in meeting the PSD increments and NAAQS. The permittee shall submit results of this dispersion model in Start-up Notification under Condition Part III.B.5.(b), along with the corresponding constraints, and record-keeping which is put in place to demonstrate ongoing compliance with the constraints.

III. E. Requirements that apply to all projects/facility changes authorized under Part III.A: Stack Parameters

1. The permittee shall maintain a current list of stacks and corresponding parameters. Prior to implementation of any project/facility change authorized under Part III.A of this permit which requires assessment by dispersion modeling under Part III.C or D, the permittee shall revise the list of stacks and their corresponding parameters with the list of stacks and their corresponding parameters used in the most recent dispersion model showing compliance with NR 445, PSD increments and NAAQS. The list of stacks and stack parameters shall be continuously updated after a new process is installed so future modeling analyses includes the most current list of stacks and stack parameters.
2. No project/facility change authorized under Part III.A of this permit shall commence operation until the actual dimensions of all stacks of the facility are according to those listed in Part III.E.1.

III. F. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Spray/Paint Booth Coating

1. The permittee shall meet all conditions at section H of Part I of this permit for each new or modified spray/paint booth coating project. These requirements shall apply separately to each such spray booth including the LACT requirements in which each spray booth shall utilize high volume low pressure systems (HVLP) according to I.H.2.a.(1) and each spray booth shall be allotted a VOC emissions limit of 2,337 lb/month, averaged over 12 months.

III. G. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Ceramic Fiber Making

1. The permittee shall meet all conditions at section I of Part I of this permit for each new or modified ceramic fiber maker. These requirements shall apply to the collection of all such lines with the emission limitations from section I of Part I applying across the collection of lines as follows.
 - (a) I.I.1.a(1) Formaldehyde emissions from all ceramic fiber lines combined to be no more than 166 lb/mo, averaged over each 12 consecutive month period
 - (b) I.I.1.a(2) Formaldehyde emissions from processes P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6), and any existing ceramic fiber lines modified under authority of Part III.A of this permit, and any new ceramic fiber lines installed under authority of Part III.A of this permit, shall be controlled

⁵ The modeling analysis shall include the most recent list of stacks and stack parameters.

by at least 41%, on average, between all process lines [P15, P16, P19, P22, and any modified/new processes under Part III.A] while using the worst case raw material family of fibers.

(c) I.I.2.a(1)b. VOC emissions shall not exceed 13,500 pounds per month averaged over each 12 consecutive month period for all ceramic fiber makers, including any that might be added or modified under authority of Part III.A of this permit.

(d) I.I.2.a(1)c. During the use of worst case raw materials, VOC emissions from processes P15 (CF1), P16 (CF2), P19 (CF5), P22 (CF6), and any existing ceramic fiber lines modified under authority of Part III.A of this permit, and any new ceramic fiber lines installed under authority of Part III.A of this permit, shall be controlled at a control efficiency of at least 80%, on average, between all process lines controlled.

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks	<p>(1) The concentration of total chromium at the exhaust of each affected source shall be no more than 0.015 mg/dscm. [40 CFR 63.342(c)(1)]</p> <p>(2) The emission limitations under I.H.(1)a. apply during tank operation as well as during periods of startup and shutdown. The emission limitations do not apply during periods of malfunction. However, work practice standards that address operation and maintenance and that are required by I.H.(1)b. shall be followed during malfunctions. [40 CFR 63.342(b)(1)]</p> <p>(3) Each new or reconstructed affected source shall be in compliance with the emission limits and corresponding applicable requirements as of start-up. [40 CFR 63.343(a)(2)]</p>	<p>(1) OPERATE and MAINTAIN: the affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by paragraph I.H.(1).b.(3) of this section, including during periods of startup, shutdown, and malfunction [40 CFR 63.342(f)(1)(i)]</p> <p>(2) If a group of tanks share a common add-on air pollution control device, then compliance with the emission limit shall be determined according to Section 40 CFR 63.344(e), as applicable. [40 CFR 63.342(b)(2)]</p> <p>(3) MALFUNCTIONS: the permittee shall correct each malfunction as soon as practicable, according to the O&M Plan [40 CFR 63.342(f)(1)(ii)]</p> <p>(4) OPERATION AND MAINTENANCE PLAN [O&M] [40 CFR 63.342(f)(3)]</p> <p>(a) The permittee shall prepare an O&M Plan with content according to 40 CFR 63.342(f)(3)(i). This requirement may be met in part or in full using (SOP) manuals, OSHA plans, and/or other existing plans.</p> <p>(b) RETAIN: retain the O&M Plan for life of the 40 CFR 63 subpart N Affected Source, OR until the source is no longer subject to 40 CFR 63 subpart N. Previous versions of the O&M Plan shall be retained for 5 yrs</p> <p>(c) IF: a malfunction occurs AND actions taken are inconsistent with the O&M Plan, THEN:</p>	<p>(1) IF: the permittee elects to meet the emissions standard for chromium by applying a composite mesh-pad [CMP] system air pollution control device, OR: by applying a combination of a CMP AND a packed bed scrubber air pollution control device, THEN:</p> <p>(a) INSPECT and RECORD: visually inspect, once per quarter, the composite mesh-pad [CMP] system air pollution control device as follows:</p> <ul style="list-style-type: none"> • overall CMP inspection, to ensure proper drainage, no chronic acid buildup on pads, and no evidence of chemical attack on structure • the back part of the mesh pad closest to the fan to ensure no breakthrough of chromic acid mist • ductwork from the tank to the CMP to ensure no leaks <p>[40 CFR 63.342 Table 1, 40 CFR63.346(b)(1)]</p> <p>(b) PERFORM and RECORD: washdown of the composite mesh-pads, according to the frequency specified by the manufacture, or equal specification [40 CFR 63.342 Table 1, 40 CFR63.346(b)(1)]</p> <p>(c) MONITOR and RECORD: pressure drop across the composite mesh-pad system air pollution control device Frequency: once per day that the affected source is operating [40 CFR 63.343(c)(1)(ii)]</p> <p>The affected source is in compliance with the standards if it is operating within ± 1 inch H₂O column of the pressure drop value established during the initial performance test, OR is operating within the range of compliant values for pressure drop</p>

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)		<ul style="list-style-type: none"> • RECORD: the actual actions taken, AND • REPORT: by telephone [Due: 2 working days after commencing the actions inconsistent with the plan], AND • SUBMIT: by written letter [due: 7 work days after the end of the event] <p>(d) IF: a malfunction occurs which is inadequately addressed by the O&M Plan, THEN REVISE: the O&M Plan within 45 days of the malfunction event</p> <p>(5) SUBMIT: Semiannual Summary Report Due: each January 30 and July 30, for the preceding calendar half-year reporting period Content: according 40 CFR 63.347(g)(3) [40 CFR 63.347(g)(1)]</p> <p>IF: more than one monitoring device is used to demonstrate compliance with the emission standards, THEN REPORT: the results for each monitoring device, EXCEPT IF: one monitoring device is a backup [40 CFR 63.347(g)(4)]</p> <p>IF: an emission limit is exceeded, THEN SUBMIT: the Summary Report quarterly, until a request to reduce reporting frequency is approved according to 40 CFR 63.347(g)(2) [40 CFR 63.347(g)(1)(ii)]</p> <p>(6) For each new OR reconstructed affected source</p> <p>(a) SUBMIT: notification of construction or reconstruction, containing the information according to 40 CFR 63.345(b)(2) and (3), as applicable</p>	<p>established during multiple performance tests [40 CFR 63.343(c)(1)(ii)]</p> <p>(2) IF: the permittee elects to meet the emissions standard for chromium by applying a packed bed scrubber system air pollution control device, THEN:</p> <p>(a) INSPECT and RECORD: visually inspect, once per quarter, the packed bed scrubber air pollution control device as follows:</p> <ul style="list-style-type: none"> • to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device • Visually inspect back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist • ductwork from tank or tanks to the control device to ensure there are no leaks [40 CFR 63.342 Table 1, 40 CFR 63.346(b)(1)] <p>(b) ADD: fresh makeup water to the top of the packed bed, according to 40 CFR 63.342 Table 1, and according to the frequency specified by the manufacture, or equal specification [40 CFR 63.342 Table 1, 40 CFR 63.346(b)(1)]</p> <p>(c) MONITOR and RECORD: velocity-P at the inlet to the packed-bed system, AND P- drop across the scrubber system Frequency: once per day that the affected source is operating [40 CFR 63.343(c)(2)(ii)]</p> <p>The affected source is in compliance with the standards if it is operating within:</p>

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)		<p>Due: "as soon as practicable before the construction or reconstruction is planned to commence" [40 CFR 63.345(b)(1)]</p> <p>(b) SUBMIT: notification of the actual date of startup within 30 calendar days after such date [40 CFR 63.347(c)(2)(iii)]</p> <p>(c) SUBMIT: Notification of Compliance Status (NCS), containing the information at 40 CFR 347(e) and (f) as applicable Due: within 90 day following completion of the compliance demonstration of 40 CFR 63.7 and §343(b) [40 CFR 63.347(e)]</p> <p>(7) IF: multiple sources are controlled by a common add-on air pollution control device, INCLUDING IF: at least one of the sources is NOT a MACT N Affected Source, THEN:</p> <p>(a) MEASURE: outlet Cr concentration according to 40 CFR 63.344(e), AND</p> <p>(b) SUBMIT: the compliance measurements and calculations with the Notification of Compliance Status required by 40 CFR 63.347(e) [40 CFR 63.344(e)]</p>	<ul style="list-style-type: none"> • ±10% of the velocity-P value established during the initial performance test, AND ±1 inch of H₂O column of the P-drop value established during the initial performance test, OR • within the range of compliant operating parameter values established during multiple performance tests [40 CFR 63.343(c)(2)(ii)] <p>(3) IF: the permittee elects to meet the emissions standard for chromium by applying a fiber-bed mist eliminator air pollution control device, THEN:</p> <p>(a) INSPECT and RECORD: visually inspect, once per quarter, the fiber-bed mist eliminator air pollution control device as follows:</p> <ul style="list-style-type: none"> • the fiber-bed unit and prefiltering device to ensure there is proper drainage, no chromic acid buildup in the units, and no evidence of chemical attack on the structural integrity of the devices • ductwork from tank or tanks to the control device to ensure there are no leaks [40 CFR 63.342 Table 1, 40 CFR 63.346(b)(1)] <p>(b) PERFORM and RECORD: washdown of fiber elements, according to the frequency specified by the manufacture, or equal specification [40 CFR 63.342 Table 1, 40 CFR 63.346(b)(1)]</p> <p>(c) MONITOR and RECORD: pressure drop across the across the fiber-bed mist eliminator, AND pressure drop across the control device installed upstream of the fiber bed to prevent plugging Frequency: once per day that the affected source is operating</p>

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)			<p>[40 CFR 63.343(c)(4)(ii)]</p> <p>The affected source is in compliance with the standards if it is operating within:</p> <ul style="list-style-type: none"> • ± 1 inch of H₂O column of the P- drop value established during the initial performance test, OR • the range of compliant operating parameter values established during multiple performance tests <p>[40 CFR 63.343(c)(4)(ii)]</p> <p>(4) IF: the permittee elects to meet the emissions standard for chromium by applying a foam blanket air pollution control device, THEN:</p> <p>(a) MONITOR and RECORD: foam blanket thickness Frequency: according to 40 CFR 63.343(c)(6)(ii) and (iii) [40 CFR 63.343(c)(6)(ii)]</p> <p>The affected source is in compliance with the standards if it is operating at a foam blanket thickness within:</p> <ul style="list-style-type: none"> • \geq the value established during the performance test, OR • < 1 inch [if option elected] <p>[40 CFR 63.343(c)(6)(ii)]</p> <p>(5) IF: the permittee elects to meet the emissions standard for chromium by using both a fume suppressant AND an add-on air pollution control device, THEN:</p> <p>(a) PERFORM: as applicable and according to 40 CFR 63.343(c)(7):</p> <ul style="list-style-type: none"> • monitoring according to 40 CFR 343(c)(1) - (6), AND

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)			<ul style="list-style-type: none"> • work practice standards of Table 1 of 40 CFR 63.342 [40 CFR 63.343(c)(7)] (b) MONITOR and RECORD: the date and time that fume suppressants are added to the electroplating or anodizing bath [40 CFR 63.34b(b)(13)] (6) All monitoring devices used to demonstrate ongoing compliance with the emissions standard [through an applicable site-specific operating parameter] shall be installed to assure representative measurement, and shall be installed, operated, and calibrated according to manufacturer's written specifications, or equivalent. [40 CFR 63.344(d)(2)] (7) RECORD: each instance of maintenance of: <ul style="list-style-type: none"> (a) the affected source, AND (b) the CMP air pollution control device, AND (c) monitoring equipment [40 CFR 63.346(b)(2)] (8) RECORD: total process op. time for the reporting period [40 CFR 63.346(b)(11)] (9) RECORD: for each instance of a malfunction of the affected source [which could reasonably result in failure to meet an emission standard] and associated air pollution control devices and monitoring equipment: <ul style="list-style-type: none"> (a) the occurrence, duration, and cause (if known) (b) each specific period (date, time of start/end) of excess emissions (c) actions taken during malfunction IF inconsistent with the O&M plan (d) other records as needed to demonstrate consistency with the O&M Plan

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)			<p>[40 CFR 63.346(b)(3)-(5), (9)-(10)]</p> <p>(10) CONDUCT: an initial performance test, according to 40 CFR 63.343(b)(1) and 40 CFR 63.7, as applicable.</p> <p>(a) Due: within 180 days of startup</p> <p>(b) IF: an air pollution control device is used to meet the chromium emissions limit, THEN: establish, during the performance test, a site-specific operating parameter as applicable:</p> <ul style="list-style-type: none"> • IF: use a composite mesh-pad [CMP] system air pollution control device, OR IF: use a CMP in conjunction with a packed bed scrubber, THEN: pressure drop across the CMP [40 CFR 63.343(c)(1)(i) and (c)(3)] • IF: use a packed bed scrubber air pollution control device, THEN: P-drop across the system, AND velocity-P at the common inlet of the control device [40 CFR 63.343(c)(2)(i)] • IF: use a wetting agent-type OR combination wetting agent-type/foam blanket fume suppressant, THEN: surface tension of the bath [40 CFR 63.343(c)(5)(i)] • IF: use a fiber bed mist eliminator, THEN: pressure drop across the across the fiber-bed mist eliminator, AND pressure across the control device installed upstream of the fiber bed to prevent plugging [40 CFR 63.343(c)(4)(i)] • IF: use a foam blanket, THEN: thickness of the foam blanket, OR MAY ELECT: a default criteria for the foam blanket thickness of ≥ 1 inch [40 CFR 63.343(c)(6)(i)] <p>(11) For each performance test:</p> <p>(a) WRITE: a test plan [submit to the Administrator only if requested] [40 CFR 63.344(a)]</p> <p>(b) DOCUMENT: test results according to 40 CFR 63.344(a)(1)-(9) AND 346(b)(6), including conditions</p>

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)			during the performance tests, as needed to demonstrate compliance [40 CFR 63.344(a)] (c) USE: test methods according to test methods at §63.344(c), (d) NOTIFY: in writing, within 60 days prior to the test [40 CFR 63.347(d)]
2. Particulate Matter	<p>(1) The most restrictive of the applicable limit found in [s. NR 415.05(1), Wis. Adm. Code] AND</p> $E = 3.59 (P)^{0.62}$ <p>where, E is the emission limit in pounds per hour, and P is the process weight rate in tons per hour. [s. NR 415.05(2), Wis. Adm. Code]</p> <p>OR</p> <p>A more restrictive particulate matter emission limit determined by modeling. [s. 285.65(7), Wis. Stats.]</p>	<p>(1) If a control device is required for particulate matter emissions to meet the National Ambient Air Quality Standards (NAAQS), then the facility shall perform the associated monitoring required for that control device in accordance with the Wis. Adm. Code.</p>	<p>(1) REFERENCE TEST METHOD: PM IE: emissions testing is requested by the Department for purposes of determining compliance with the PM emissions limit, THEN: use 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensable backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code.]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) RECORD: the appropriate operating data as necessary on the control device, if required, to satisfy requirements in the Wis. Adm. Code.</p> <p>(4) RECORD: each inspection, check, and any maintenance or repairs performed on the control device, if required, including the date and time of the action, initials of inspector, and the results. [ss. NR 439.04(1)(d), and NR 407.09(1)(c) Wis. Adm. Code]</p> <p>(5) MAINTAIN: the operating parameters on the control device, if required, in accordance with the manufacturer's recommendations, or equal, and calibrate at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis.</p>

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Particulate Matter (continued)			Adm. Code]
3. Visible Emissions	(1) 20% Opacity [s. NR 431.05, Wis. Adm. Code]	(1) The Compliance Demonstration requirements for chromium and particulate matter emissions, conditions under I.G.1.b. and I.G.2.b., are deemed sufficient to demonstrate compliance with the visible emission limit.	<p>(1) REFERENCE TEST METHOD: Visible Emissions IF: emissions testing is requested by the Department for purposes of determining compliance with the visible emissions limit, THEN: use U.S. EPA Method 9, OR: other methods as approved by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code]</p> <p>(2) The recordkeeping requirements for particulate matter emissions outlined in condition I.G.2.(c) also serve as recordkeeping requirements for visible emissions. [s. NR 407.09(1)(c)1.a., Wis. Adm. Code]</p>
4. Volatile Organic Compounds	<p>(1) Latest Available Control Techniques and Operating Practices Demonstrating Best Current Technology (LACT) determined to be the following:</p> <p>(a) the workpractice consisting of cleaning performed using only isopropyl alcohol (IPA) which is applied to parts using squeegee bottles which are no larger than 1-liter in volume, and/or</p> <p>(b) no more than 1,790 1-liter squeegee bottles used per month, based on a 12-month rolling average, or an equivalent combination of bottles of different</p>	<p>(1) (a) The permittee shall calculate the number of 1-liter squeegee bottles used in one month, based on a 12-month rolling average</p> <p>(b) The 12-monthly average amount of 1-liter squeegee bottles used shall be calculated using the following equation:</p> $E_{total} = 3X_n$ <p>where,</p> $E_{total} = \text{monthly average amount of squeegee bottles used;}$ $X_n = \text{number of 1-liter squeegee bottles used in one month as calculated in condition III.H.4.b.(1).(a).}$ <p>[s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>OR</p> <p>(2) Provide the Wisconsin DNR for review and approval</p>	<p>(1) MAINTAIN: on-site, a Material Safety Data Sheet (MSDS) or equivalent to document the VOC content of each cleanup solvent used [ss. NR 439.04(1) and 439.04(4), Wis. Adm. Code]</p> <p>(2) RECORD:</p> <p>(a) monthly number of squeegee bottles used by each chrome process line, and the volume of bottles.</p> <p>(b) the total number of squeegee bottles used each year</p> <p>(c) the 12 month rolling average of squeegee bottles used</p> <p>(d) The actual and average monthly VOC emissions determined at the end of each calendar month according to III.H.4.b.(2). [s. NR 439.04(1)(d) and (3), Wis. Adm. Code]</p>

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
4. Volatile Organic Compounds (continued)	volume which results in VOC emissions of no more than 3,150 pounds per month, based on a 12-month rolling average (18.9 tons per year). [s. NR 424.03(2)(c), Wis. Adm. Code; s. 285.65(3) and s. 285.65(7), Wis. Stats.]	how the facility will meet the 3,150 lb/month based on a 12-month rolling average VOC emission limit. [s. NR 407.09(4)(a)1., Wis. Adm. Code]	

III. I. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: R&D/Pilot/Development Projects

For all projects in this R&D section: within 12 months of startup of a research and testing activity approved in this section, the facility shall determine maximum theoretical emissions, potential emissions, and the potential applicable State and Federal compliance requirements relating to this potential process. On or before the end of this 12 month period, 3M will decide if the process is to be placed into production or will otherwise remain at this facility. If the facility chooses to keep the process at this facility, and if emissions exceed permitting thresholds as identified in NR 406 and/or NR 407, Wis. Adm. Code, the facility shall apply for and receive either a new source construction permit and/or a modification of the Title V operating permit before production commences. If emissions are less than permitting thresholds and the project meets the exemptions identified in NR 406, Wis. Adm. Code, the Wisconsin DNR shall issue a construction permit exemption. If 3M chooses not to proceed with placing the process in production, the process shall be removed from the facility or remain non-operational. If 12 months is insufficient to provide 3M an ability to install, test, and determine the fate of the potential process under this approval, 3M is prohibited to continue work on the process/project until such time as 3M applies for and receives a new source construction permit per NR 406, Wis. Adm. Code, based on anticipated emissions from the process/project, for those projects above exemption levels identified in NR 406.04(2), Wis. Adm. Code. [NR 406.04(1)(i) & NR 406.03, Wis. Adm. Code]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile Organic Compounds	<p>(1) LACT consists of:</p> <p>(a) actual VOC emissions ≤ 25 ton/yr, averaged over any 12 consecutive month period,</p> <p>[s. NR 424.03(2)(c), Wis. Adm. Code, Environmental Cooperative Agreement between WI DNR and 3M of 10/2/2002 pursuant to s. 299.80, Wis. Stat., and s. 285.65(7), Wis. Stat.]</p>	<p>(1) DOCUMENT: calculations for determining VOC emissions</p> <p>(2) RECORD: for each month of operation:</p> <p>(a) amount (lbs) of each raw material used;</p> <p>(b) VOC emissions [lb/mo], and ton/yr [s. NR 439.04(d), Wis. Adm. Code]</p> <p>(3) RECORD: for each day, whether the emissions-generating portion of the process operated</p>	<p>(1) Reference Test Method: VOCs IF: emissions testing is requested by the Department for purposes of determining compliance with VOC emission limits, THEN: use US EPA Methods 18, 25, 25A or 25B, OR other methods as approved by the Department. [s. NR 439.06(3)(a), Wis. Adm. Code]</p>
2. Particulate Matter	<p>(1) The most restrictive of the applicable limit found in [s. NR 415.05(1), Wis. Adm. Code] AND</p> $E = 3.59 (P)^{0.62}$ <p>where, E is the emission limit in pounds per hour, and P is the process weight rate in tons per hour. [s. NR 415.05(2), Wis. Adm. Code]</p> <p>OR</p> <p>A more restrictive particulate matter emission limit determined by modeling. [s. 285.65(7), Wis.</p>	<p>(1) If a control device is required for particulate matter emissions to meet the National Ambient Air Quality Standards (NAAQS), then the facility shall perform the associated monitoring required for that control device in accordance with the Wis. Adm. Code.</p>	<p>(1) REFERENCE TEST METHOD: PM IF: emissions testing is requested by the Department for purposes of determining compliance with the PM emissions limit, THEN: use 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code.]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) RECORD: the appropriate operating data as necessary on the control device, if required, to satisfy requirements in the Wis. Adm. Code.</p>

III. I. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: R&D/Pilot/Development Projects

For all projects in this R&D section: within 12 months of startup of a research and testing activity approved in this section, the facility shall determine maximum theoretical emissions, potential emissions, and the potential applicable State and Federal compliance requirements relating to this potential process. On or before the end of this 12 month period, 3M will decide if the process is to be placed into production or will otherwise remain at this facility. If the facility chooses to keep the process at this facility, and if emissions exceed permitting thresholds as identified in NR 406 and/or NR 407, Wis. Adm. Code, the facility shall apply for and receive either a new source construction permit and/or a modification of the Title V operating permit before production commences. If emissions are less than permitting thresholds and the project meets the exemptions identified in NR 406, Wis. Adm. Code, the Wisconsin DNR shall issue a construction permit exemption. If 3M chooses not to proceed with placing the process in production, the process shall be removed from the facility or remain non-operational. If 12 months is insufficient to provide 3M an ability to install, test, and determine the fate of the potential process under this approval, 3M is prohibited to continue work on the process/project until such time as 3M applies for and receives a new source construction permit per NR 406, Wis. Adm. Code, based on anticipated emissions from the process/project, for those projects above exemption levels identified in NR 406.04(2), Wis. Adm. Code. [NR 406.04(1)(i) & NR 406.03, Wis. Adm. Code]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Particulate Matter (continued)	Stats.]		<p>(4) RECORD: each inspection, check, and any maintenance or repairs performed on the control device, if required, including the date and time of the action, initials of inspector, and the results. [ss. NR 439.04(1)(d), and NR 407.09(1)(c) Wis. Adm. Code]</p> <p>(5) MAINTAIN: the operating parameters on the control device, if required, in accordance with the manufacturer's recommendations, or equal, and calibrate at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis. Adm. Code]</p>
3. Visible Emissions	(1) 20% Opacity [s. NR 431.05, Wis. Adm. Code]	(1) The compliance demonstration requirement for particulate matter emissions, condition under III.I.2.b.(1) are deemed sufficient to demonstrate compliance with the visible emission limit.	<p>(1) Reference Test Method: Visible Emissions IF: emissions testing is requested by the Department for purposes of determining compliance with visible emission limits, THEN: use USEPA Method 9 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, Wis. Adm. Code, OR other methods as approved by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code]</p> <p>(2) The recordkeeping requirements for particulate matter emissions outlined in condition III.I.2.c.(3) and (4) also serve as recordkeeping requirements for visible emissions. [s. NR 407.09(1)(c)1.a., Wis. Adm. Code]</p>

III. J. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III. A: Web Coating

On the basis of a regulatory streamlining analysis performed according to U.S. EPA White Paper #2, the emission standards of 40 CFR 63 subpart JJJJ and attendant reporting, recordkeeping, and monitoring requirements subsume requirements of the following:

- NR 424 Control of Organic Compound Emissions from Process Lines
- NR 422 Control of Organic Compound Emissions from Surface Coating, Printing, and Asphalt Surfacing Operations
- 40 CFR 60 sub RR Pressure Sensitive Tape and Label Surface Coating

Installation of one or more web coating lines at the 3M Menomonie plant constitutes "modification of an existing affected source" under 40 CFR 63 subpart JJJJ [the affected source being the collection of web coating lines], and as such is not subject to advance written approval under 40 CFR 63.5. Reconstruction of the 40 CFR 63 subpart JJJJ affected source at the 3M Menomonie plant is not authorized under Part III.A of this permit.

III. J. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III. A: Web Coating

These requirements apply, as applicable, to the entire collection of web coating lines upon the first instance of this section being invoked by a qualifying modification or installation of a web coating line. The requirements at section I.F.1 are at that time superseded by this section (Part III.J), with excepting of I.F.1.a.(3) and I.F.1.b.(5) and (6), and (7), which pertain to several of the existing MRC Resin Coating Lines.

Pollutant	a. Emission Limitations	b. Compliance Demonstration
1. Volatile Organic Compounds (VOC) and Organic Hazardous Air Pollutant (OHAP) Emissions	<p>(1) The permittee shall comply with these requirements the earlier of: 1) the effective date of this Title V operating permit, OR 2) the compliance date of December 5, 2005 as referenced at 40 CFR 63.330(a) [40 CFR 63.3330(a), and s. 285.65(13), Wis. Stats.]</p> <p>(2) LIMIT: the web coating lines, as a collection of all web coating lines at the facility, shall limit VOC emissions to the level specified in (a), (b), (c), OR (d):</p> <p>(a) no more than 5 percent of the VOC applied for each month (95 percent reduction); OR</p> <p>(b) no more than 4 percent of the mass of coating materials applied for each month; OR</p> <p>(c) no more than 20 percent of the mass of coating solids applied for each month; OR</p> <p>(d) If the permittee uses an oxidizer to control VOC emissions, operate the oxidizer such that an outlet VOC concentration of no greater than 20 parts per million by</p>	<p>(1) Each month, the permittee shall demonstrate compliance with any one or more of the emissions standards options at 40 CFR 63.3320(b), using the applicable procedures at 40 CFR 63.3370 for the combination of always-controlled, intermittently-controlled, and never-controlled workstations of the affected source. [40 CFR 63.3370]</p> <p>(2) DETERMINE: "as-purchased" volatile organic content AND coating solids content of each coating material applied, as applicable for the emission limit(s) elected in III.J.1.a.(2) for that month</p> <p>HOW:</p> <ul style="list-style-type: none"> • by testing using EPA Method 24 [40 CFR part 60, Appendix A], according to 40 CFR 63.3360(d)(1), OR • by formulation data, according to 40 CFR 63.3360(d)(2), OR • by an alternative test method, approved by the Administrator at EPA in accordance with 40 CFR 63.7(f) <p>(3) DETERMINE: "as-applied" volatile organic content AND coating solids content of each coating material applied, as applicable for the emission limit(s) elected in III.J.1.a.(2) for that month</p> <p>HOW: using Equation 1b and 2, as applicable, according to 40 CFR 63.3370 [40 CFR 63.3360(d), and s. 285.65(13), Wis. Stats.]</p>

III. J. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III. A: Web Coating

These requirements apply, as applicable, to the entire collection of web coating lines upon the first instance of this section being invoked by a qualifying modification or installation of a web coating line. The requirements at section I.F.1 are at that time superseded by this section (Part III.J), with excepting of I.F.1.a.(3) and I.F.1.b.(5) and (6), and (7), which pertain to several of the existing MRC Resin Coating Lines.

Pollutant	a. Emission Limitations	b. Compliance Demonstration
1. Volatile Organic Compounds (VOC) and Organic Hazardous Air Pollutant (OHAP) Emissions (continued)	<p>volume (ppmv) is achieved and the efficiency of the capture system is 100 percent.</p> <p>[40 CFR 63.3320(b), and s. 285.65(13), Wis. Stats.]</p> <p>(3) The emissions standards apply at all times, EXCEPT: during startup, shutdown, and malfunction [40 CFR 63.6(f)(1)]</p> <p>(4) The permittee shall comply with the appropriate VOC limitations listed in NR 419 through NR 424 of the Wis. Adm. Code. [s. 285.65(7), Wis. Stats.]</p>	

III. J. Air Pollution Control Device (APCD) Requirements for Web Coating Lines. **IF:** a thermal oxidizer or catalytic oxidizer is installed or otherwise used to meet the emission limits of 40 CFR 63 sub JJJJ, **THEN:** meet the following additional requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
(1) each work station of each web coating line which is intermittently controlled by an air pollution control device	<p>PREVENT: unintentional bypass of the air pollution control device (APCD) by using any of the following:</p> <p>(a) auto-stop the web coating line of the work station when flow is diverted away from an operating APCD</p> <p>(b) car-seal or lock-and-key valve closure, secured in closed position</p> <p>(c) air flow position indicator</p> <p>(d) continuous monitoring of valve position when source is operating AND APCD is in use</p>	40 CFR 63.3350(c)(4)
(2) each intermittently-controlled work station with bypass control provided by auto-stop the web coating line	<p>INSPECT: the auto-stop system to verify that it will detect flow diversions and shut down operations</p> <p>WHEN: once per month</p>	40 CFR 63.3350(c)(4)
(3) each intermittently-controlled work station with bypass control provided by car-seal or lock-and-key valve closure	<p>INSPECT: the seal or closure mechanism to verify that the valve or damper is closed</p> <p>WHEN: once per month</p> <p>HOW: visual</p>	40 CFR 63.3350(c)(2)

III. J. Air Pollution Control Device (APCD) Requirements for Web Coating Lines. **IF:** a thermal oxidizer or catalytic oxidizer is installed or otherwise used to meet the emission limits of 40 CFR 63 sub JJJJ, **THEN:** meet the following additional requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
(4) each intermittently-controlled work station with bypass control provided by an air flow position indicator	INSTALL, CALIBRATE, MAINTAIN, AND OPERATE: according to the manufacturer's specifications LOCATE: at the entrance to each air pollution control device (APCD) bypass line RECORD: time, flow control position WHEN: <ul style="list-style-type: none"> • once per hour, AND • each occurrence of a change of flow direction 	40 CFR 63.3350(c)(1)
(5) each intermittently-controlled work station with bypass control provided by continuous monitoring of valve position	INSPECT: to verify that the monitor will indicate valve position WHEN: once per month	40 CFR 63.3350(c)(3)

III. J. Recordkeeping Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
each work station intermittently controlled by an APCD, DURING: each bypass of the APCD	RECORD: the mass of each coating material applied	40 CFR 63.3350(c)
each continuous parameter monitoring system (CPMS) used by each: <ul style="list-style-type: none"> • APCD • capture system • bypass control 	RECORD: each: <ul style="list-style-type: none"> • inspection • calibration • validation check 	40 CFR 63.3350(e)(5)
each APCD AND its monitoring equipment	RECORD: each instance of required maintenance	40 CFR 63.10(b)(2)(iii)
each APCD AND its monitoring equipment	RECORD: each occurrence and duration of each malfunction	40 CFR 63.10(b)(2)(ii)

III. J. Recordkeeping Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
each continuous monitoring system (CMS)	RECORD: <ul style="list-style-type: none"> • each calibration check • each adjustment and maintenance 	40 CFR 63.10(b)(2)(x)
each CMS	RECORD: the date and time of each instance of: <ul style="list-style-type: none"> • CMS inoperative, EXCEPT: zero (low-level) and high-level checks • CMS out-of-control [as defined at 40 CFR 63. 63.8(c)(7)] 	40 CFR 63.10(c)(5)
each CMS malfunction	RECORD: <ul style="list-style-type: none"> • the nature and cause (if known) • corrective action taken or preventive measures adopted • the nature of repairs or adjustments 	40 CFR 63.10(c)(10)
each web coating line connected to an APCD	RECORD: each occurrence and duration of each startup, shutdown, or malfunction	40 CFR 63.10(b)(2)(i)
each CMS	RECORD: the date and time of each instance of excess emissions and parameter monitoring exceedances during: <ul style="list-style-type: none"> • startups, shutdowns, and malfunctions • all other periods 	40 CFR 63.10(c)(7)
each web coating line with a CMS	RECORD: total process operating time during the reporting period	40 CFR 63.10(c)(13)
each occurrence of a startup, shutdown, OR malfunction	RECORD: as needed <ul style="list-style-type: none"> • to demonstrate that the response was consistent with the startup, shutdown, and malfunction (SSM) Plan, OR • why the response was NOT consistent with the SSM Plan 	40 CFR 63.6(e)(3)(iii)
IF: a startup, shutdown, OR malfunction occurs, AND: the SSM Plan inadequately addresses the event	REVISE: Startup, Shutdown, Malfunction (SSM) Plan DUE: within 45 day after the event IF: revision of the SSM Plan " <i>alters the scope of the activities at the source which are deemed to be a startup, shutdown, malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard</i> " THEN SUBMIT: a notification describing changes to permitting authority	40 CFR 63.6(e)(3)(viii)

III. J. Recordkeeping Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
each workstation of each web coating line	DETERMINE: OHAP mass fraction of each coating material "as-purchased" AND "as-applied" HOW: according to the methods at 40 CFR 63.3360(c)(1)-(4)	40 CFR 63.3360(c)
one or more workstations of one or more web coating lines, IF ELECT: VOC content as a surrogate for organic HAP	DETERMINE: for each coating material applied, "as-purchased" AND "as-applied" • VOC content [HOW: Method 24, OR formulation data], AND • coating solids content [HOW: Equation. 1b AND 2 of 40 CFR 63.3370]	40 CFR 63.3360(d)

III. J. Monitoring Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
each oxidizer, EXCEPT: catalytic oxidizers	MONITOR: temperature, in the combustion zone HOW: by continuous parameter monitoring system (CPMS) = temperature sensor located in the combust. zone, AND a continuous recorder ACCURACY: greater of: $\pm 1\%$ of true temperature ($^{\circ}\text{C}$) being monitored, OR $\pm 1^{\circ}\text{C}$	40 CFR 63.3350(e)(9)(ii)
each catalytic oxidizer	MONITOR: ΔT across the catalyst bed HOW: by CPMS = temperature sensor at inlet and outlet of the catalyst bed, AND continuous recorder ACCURACY: greater of: $\pm 1\%$ of true temperature ($^{\circ}\text{C}$) being monitored, OR $\pm 1^{\circ}\text{C}$	40 CFR 63.3350(e)(9)(iii)
each oxidizer	INSTALL, CALIBRATE, MAINTAIN, AND OPERATE: the CPMS according to the manufacturer's specs.	40 CFR 63.3350(e)(9)(i)
each oxidizer	VERIFY: the calibration of the chart recorder, data logger, AND temperature indicator, OR IF: equipment cannot be calibrated, THEN: replace WHEN: once every 3 months	40 CFR 63.3350(e)(9)(i)
capture system	MONITOR: capture system operating parameter WHEN: continuously, when any associated web coating line is operated HOW: according to the <i>Capture System Site-Specific Monitoring Plan</i>	40 CFR 63.3350(f)(3)

III. J. Monitoring Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
each CPMS used by each: • APCD • capture system	CPMS Data Collection FREQUENCY: ≥ 1 cycle of CPMS operation for each successive 15-min period FULFILLMENT: collect valid data for $\geq 90\%$ of the hours of process operation [where: a valid hour of data ≥ 4 equally spaced successive CPMS cycles]	40 CFR 63.3350(e)(1)
each CPMS used by each: • APCD • capture system	CPMS Data Reduction DETERMINE: each hour: • hourly avg. of all CPMS recorded values, AND • rolling 3-hr average of all recorded readings for each operating period HOW: according to 40 CFR 63.3350(e)(3) and (4), and (e)(7) [for data to exclude]	40 CFR 63.3350(e)(3)
each CPMS used by each: • APCD • capture system • bypass control	MAINTAIN: parts for routine repair	40 CFR 63.3350(e)(6)
each CPMS used by each: • APCD • capture system • bypass control	WHEN TO MONITOR: at all times that the unit is operating, EXCEPT: during: • CPMS malfunction, OR • repair, OR • QA/QC (including calibration checks, zero and span adjust)	40 CFR 63.3350(e)(7)

III. J. Reporting and Notification Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
the collection of web coating lines [the MACT JJJJ affected source]	SUBMIT: Initial Notification DUE: 12/5/2004 CONTENT: according to 40 CFR 63.9(b)(2)(i)-(v) OR, MAY ELECT: substitute Title V application IF ... [see 40 CFR 63.3400(b)(3)-(4)]	40 CFR 63.3400(b)

III. J. Reporting and Notification Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
the collection of web coating lines [the MACT JJJJ affected source]	SUBMIT: initial Semi-annual Compliance Report DUE: 1/31/2006 [for the reporting period: 12/5/2005 to 12/31/2005] OR, MAY ELECT: submit with the closest semi-annual Title V Periodic Monitoring Report CONTENT: according to 40 CFR 63.3400(c)(2)	40 CFR 63.3400(c)
the collection of web coating lines [the MACT JJJJ affected source]	SUBMIT: Semi-annual Compliance Report DUE: 7/31/x [for the reporting period: 1/1 to 6/30/x], AND 1/31/(x+1) [for 7/1 to 12/31/x] OR, MAY ELECT: submit with the closest semi-annual Title V Periodic Monitoring Report CONTENT: according to 40 CFR 63.3400(c)(2)	40 CFR 63.3400(c)
the collection of web coating lines [the MACT JJJJ affected source], IF ELECTED	MAY ELECT: with WI DNR approval, to adjust the due date of MACT JJJJ submittals, including: <ul style="list-style-type: none"> • to be consistent with due dates under submittals of a Title V permit • to arrive at a single due date if the facility is subject to multiple MACTs, NSPSs, NESHAPs HOW: according to 40 CFR 63.9(i), 10(a)(5), 10(a)(6), 10(a)(7)	40 CFR 63.9(i)
any substantive change in any information previously submitted to WI DNR	SUBMIT: changes within 15 days after the change	40 CFR 63.9(j)
each performance test	SUBMIT: Notification of Compliance Status DUE: within 60 days of completing the test CONTENT: according to 40 CFR 63.9(h)(2)(i)	40 CFR 63.3400(e)
each occurrence of a startup, shutdown, OR malfunction, IF: the response is NOT consistent with the SSM Plan, AND IF: an emission standard is exceeded	RECORD: actions for that event NOTIFY: by telephone or fax: within 2 working days after commencing the actions that were inconsistent with the SSM Plan REPORT: by letter, within 7 working days of the end of event CONTENT: according to 40 CFR 63.10(d)(5)(ii)	40 CFR 63.6(e)(3)(iv)
use an air pollution control device (APCD)	SUBMIT: Start-up, Shutdown, Malfunction (SSM) Report HOW: per 40 CFR 63.10(d)(5) CONTENT: according to 40 CFR 63.10(d)(5)	40 CFR 63.3400(g)

III. J. Reporting and Notification Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
a startup, shutdown, or malfunction occurs, AND the facility response is consistent with the SSM Plan	SUBMIT: SSM Report DUE: 1/30/x [reporting period = 6/1/(x-1) to 12/31/(x-1)] AND 7/30/x [reporting period = 1/1/x to 7/31/x] CONTENT: according to 40 CFR 63.10(d)(5)(i)	40 CFR 63.10(d)(5)(i)

III. J. Performance Testing Requirements for Web Coating Lines. The permittee shall conduct an initial performance test of each air pollution control device and capture system used to meet the emission standards of 40 CFR 63 sub JJJ, as follows and as applicable.

Applies to:	a. Meet the following requirement	Citation
each thermal oxidizer AND catalytic oxidizer	CONDUCT: Performance Test, including establish destruction or removal efficiency of the APCD DUE: within 180 days after start-up of the APCD HOW: according to the test methods, data reduction requirements, etc. of 40 CFR 63.3360(e)(1)(i)-(x) and (e)(2), 40 CFR 63.63.7(e)(1)-(4)	40 CFR 63.3360(e)(1)
each thermal oxidizer	ESTABLISH: operating parameter = T(average) at firebox or immediately downstream WHEN: during the initial performance test HOW: according to §63.3360(e)(3)(i)	40 CFR 63.3360(e)(3)(i)
each catalytic oxidizer	ESTABLISH: operating parameter ... MAY ELECT: either: • T(average) just before the catalyst bed, AND ΔT(average) across the bed, OR • T(average) just before the catalyst bed, AND a site-specific inspection/maintenance plan [CONTENT: according to 40 CFR 63.3360(e)(3)(ii)(E)(1) - (3)] WHEN: during initial performance test HOW: according to 40 CFR 63.3360(e)(3)(ii)	40 CFR 63.3360(e)(3)(ii)
each PTE (permanent total enclosure) capture system	DEMONSTRATE: compliance with the criteria of Method 204 in Section 6 of 40 CFR 51, Appendix M	40 CFR 63.3360(f)(1)

III. J. Performance Testing Requirements for Web Coating Lines. The permittee shall conduct an initial performance test of each air pollution control device and capture system used to meet the emission standards of 40 CFR 63 sub JJJJ, as follows and as applicable.

Applies to:	a. Meet the following requirement	Citation
each capture system which is NOT a PTE	DETERMINE: capture efficiency HOW: <ul style="list-style-type: none"> • Method 204 and 204A-F [40 CFR 51 Appendix M], OR • other methods, as provided at 40 CFR 63.3360(f)(2), OR • other methods, as approved by WI DNR 	40 CFR 63.3360(f)(2)
each performance test	DEVELOP: a written, site-specific Test Plan SUBMIT: submit to WI DNR only if requested CONTENT: according to 40 CFR 63.7(c)(2)	40 CFR 63.7(c)(2)(i)
each performance test	SUBMIT: Notification of Performance Test DUE: 60 days prior to test CONTENT: according to 40 CFR 63.3400(d) [includes identification of the operating parameters of the capture system and APCD]	40 CFR 63.3400(d)
IF: a scheduled performance test cannot be performed	RESCHEDULE: according to 40 CFR 63.7(b)(2)	40 CFR 63.7(b)(2)
each performance test	REQUEST: performance audit (PA) samples from the EPA Regional Office OR from the responsible enforcement authority DUE: 30 days prior to the test ANALYZE: PA samples during the performance test, UNLESS: EPA/enforcement authority fails to provide the samples on time	40 CFR 63.7(c)(4)(i)
each performance test	SUBMIT: Performance test Report CONTENT: according to 40 CFR 63.10(d)(2) DUE: submit with the Notification of Compliance Status	40 CFR 63.3400(f)

III. J. Requirements for Written Plans and General Operating Requirements for Web Coating Lines. Meet the following requirements, as applicable

Applies to:	a. Meet the following requirement	Citation
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III. J. Requirements for Written Plans and General Operating Requirements for Web Coating Lines. Meet the following requirements, as applicable

Applies to:	a. Meet the following requirement	Citation
APPLIES IF: use an air pollution control device (APCD)	DEVELOP, IMPLEMENT: Startup, Shutdown, and Malfunction Plan DUE: 12/5/2005 [MACT JJJJ compliance date] RETENTION: each superseded version for 5 years CONTENT: according to 40 CFR 63.10(d)(5)	40 CFR 63.6(e)(3)
each capture system of each APCD	DEVELOP: Capture System Site-Specific Monitoring Plan CONTENT: specify/identify: <ul style="list-style-type: none"> • operation parameter and rationale • value or range needed to meet emissions standards • corresponding specific monitoring procedures REVIEW: annually	40 CFR 63.3350(f)
each PTE (permanent total enclosure) capture system	MEET: Method 204, Sect. 6 [40 CFR 51, Appendix M], AND ROUTE: all exhaust gases from the enclosure to an APCD	40 CFR 63.3360(f)(1)

III. K. CONDITIONS THAT APPLY TO ALL PROJECT/FACILITY CHANGES UNDER PART III.A.

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
<p>1. Criteria Pollutants: Carbon Monoxide, Oxides of Nitrogen, Particulate Matter, Sulfur Dioxide, Volatile Organic Compounds, Lead, or Lead Compounds</p>	<p>(1) The emissions for each criteria pollutant shall be limited to less than 100 tons per year for each process/facility change under Part III.A, except for R&D/Pilot/ Development Projects for which the emissions of each criteria pollutant shall be limited to less than 100 tons per year for the sum of all such R&D/Pilot/ Development Projects authorized under Part III.A.(4). The 100 tons per year limit on carbon monoxide, oxides of nitrogen, particulate matter, sulfur dioxide, volatile organic compounds, lead, or lead compounds, was established to avoid doing an environmental assessment under section NR 150.03(8)(b)1, Wis. Adm. Code and to ensure that the facility remains a minor source under PSD rules. [s. 285.65(7), Wis. Stats.]</p>	<p>(1) Emission factor data, information from Material Safety Data Sheets (MSDS), or any other information necessary shall be used to calculate criteria pollutant emissions. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(2) For each project/facility change which is made under authorization of Part III, Section A of this permit, the permittee shall perform a monthly calculation for each criteria pollutant, as identified below, which could reasonably exceed the 100 tpy criteria in III.K.1.a.(1). Procedures for performing these calculations, as applicable, are listed as follows:</p> <p>(a) Spray/Paint Booth Coating [authorized under Part III.A.(1) of this permit]</p> <ul style="list-style-type: none"> • Volatile Organic Compounds: calculated each month according to the procedure stated in I.H.3.b.(3). and sum the monthly emissions to provide emissions on an annual basis in tons per year. • Particulate Matter: calculate each month by multiplying material throughput, or other suitable characteristic of the activity, by an appropriate emissions factor from AP-42 or as derived from engineering calculations and sum the monthly emissions to provide emissions on an annual basis in tons per year. Alternatively, the permittee may assume that monthly emissions are less than or equal to the emission limit in I.H.1.a.(1). <p>(b) Ceramic Fiber Making. [authorized under Condition (2) of Part III, Section A of this permit]</p> <ul style="list-style-type: none"> • Volatile Organic Compounds: calculate each month according to the procedure stated in I.I.2.b.(1) and sum the monthly emissions to provide emissions on an annual basis in tons per year. <p>(c) Chromium Plating. [authorized under Condition (3)]</p>	<p>(1) The following monthly records shall be compiled by the 15th day after the end of the month:</p> <p>(a) emission factor data, information from Material Safety Data Sheets (MSDS), or any other information used to calculate emissions and</p> <p>(b) the calculation of each criteria pollutant emitted from each process/facility change under Part III.A. in tons per year. [ss. NR 439.04 and NR 407.09(4)(a)1., Wis. Adm. Code]</p>

III. K. CONDITIONS THAT APPLY TO ALL PROJECT/FACILITY CHANGES UNDER PART III.A.

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
<p>1. Criteria Pollutants: Carbon Monoxide, Oxides of Nitrogen, Particulate Matter, Sulfur Dioxide, Volatile Organic Compounds, Lead, or Lead Compounds (continued)</p>		<p>of Part III, Section A of this permit] No monthly calculations-no criteria pollutant emissions could reasonably exceed 100 tons per year.</p> <ul style="list-style-type: none"> • Volatile Organic Compounds: calculate each month according to III.H.4.b.(1) and (2) and sum the monthly emissions to provide emissions on an annual basis in tons per year. <p>(d) R&D/Pilot/Development Projects. [authorized under Condition (4) of Part III, Section A of this permit]</p> <ul style="list-style-type: none"> • Volatile Organic Compounds: calculate each month according to the procedure stated in III.I.1.b. and sum the monthly emissions to provide emissions on an annual basis in tons per year. • Particulate Matter (PM): calculate each month by multiplying material throughput, or other suitable characteristic of the activity, by an appropriate emissions factor from AP-42 or as derived from engineering calculations and sum the monthly emissions to provide emissions on an annual basis in tons per year. Alternatively, the permittee may assume that monthly emissions are less than or equal to the emission limit on particulate matter as stated in III.I.2.a.(1). <p>(e) Web Coating. [authorized under Condition (5) of Part III, Section A of this permit]</p> <ul style="list-style-type: none"> • Volatile Organic Compounds: calculate each month by multiplying the VOC content (%) of each coating used in the month by the mass of the coating used, consistent with applicable equations that are referenced in III.J.1.b. and sum the monthly emissions to provide emissions on an annual basis in tons per year. <p>[NOTE: Criteria pollutants which are listed above for each project are those which could reasonably exceed the criteria of 100 tpy. Assurance that none of the other criteria pollutants for that project will exceed 100 tpy is provided by the underlying nature of the project or</p>	

III. K. CONDITIONS THAT APPLY TO ALL PROJECT/FACILITY CHANGES UNDER PART III.A.

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Criteria Pollutants: Carbon Monoxide, Oxides of Nitrogen, Particulate Matter, Sulfur Dioxide, Volatile Organic Compounds, Lead, or Lead Compounds (continued)		facility change. There are either no emissions of these other criteria pollutants, or the emissions are nominal in comparison with the 100 tpy limit. [accordingly, no emission limits for these substances have been established for the existing, similar plant operations at Part I] [s. NR 407.09(4)(a)1., Wis. Adm. Code]	